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Japanese Warfare

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MILITARY INTELLIGENCE SERVICE
INFORMATION BULLETIN NO. 12

WAR DEPARTMENT · WASHINGTON, D. C.

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MILITARY INTELLIGENCE SERVICE

WAR DEPARTMENT
Washington, April 22, 1942

INFORMATION BULLETIN

No. 12
MIS 461

NOTICE

1. Information Bulletins, which have replaced Tentative Lessons Bulletins, have a dual purpose: (1) to provide all officers with reasonably confirmed information from official and other reliable sources, and (2) to serve as material for lectures to troops.

2. Nondivisional units are being supplied with copies on a basis similar to the approved distribution for divisional commands, as follows:

INF DIV		CAV DIV		ARMD DIV	
Div Hq.....	8	Div Hq.....	4	Div Hq.....	11
Ren Troop.....	1	Ord Co.....	1	Ren Bn.....	1
Sig Co.....	1	Sig Troop.....	1	Engr Bn.....	1
Engr Bn.....	1	Ren Sq.....	1	Med Bn.....	1
Med Bn.....	1	Engr Sq.....	1	Maint Bn.....	1
QM Bn.....	1	Med Sq.....	1	Supply Bn.....	1
Hq Inf Regt, 1 ea..	3	QM Sq.....	1	Div Train Hq.....	1
Inf Bn, 1 ea.....	9	Hq Cav Brig, 2 ea..	4	Armd Regt, 4 ea..	8
Hq Div Arty.....	1	Cav Regt, 4 ea....	16	FA Bn, 1 ea.....	3
FA Bn, 1 ea.....	4	Hq Div Arty.....	1	Inf Regt.....	4
		FA Bn, 1 ea.....	3		
	30				32

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3. **Each command should circulate available copies among its officers.** Reproduction within the military service is permitted provided (1) the source is stated, (2) the classification is not changed, and (3) the information is safeguarded. Attention is invited to paragraph 10a, AR 380-5, which is quoted in part as follows: "A document * * * will be classified and * * * marked *restricted* when information contained therein is for official use only, or when its disclosure should be * * * denied the general public."

4. Suggestions for future bulletins are invited. Any correspondence relating to Information Bulletins may be addressed directly to the Dissemination Branch, Military Intelligence Service, War Department, Washington, D. C.

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ILLUSTRATIONS

Cover Design. Type "E" Landing Boat.

Observe: 1. Machine-gun turret; 2. Airplane type propeller, which enables the boat to traverse shallow and weed-infested water. (See MID Information Bulletin No. 7, January 24, 1942, fig. 6 and pp. 2-3.)

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SECTION I

JAPANESE LANDING OPERATIONS NEAR PAKHOI, CHINA

1. Introduction

a. Comment by Admiral Hart.—In a recent statement Admiral Thomas C. Hart, former commander of the United Nations' naval forces in Far Eastern waters, declared that the effective use of coordinated air, sea, and ground forces is one of the principal reasons for current Japanese successes. Admiral Hart's comments are quoted in part as follows:

"The accurately timed, carefully planned surprise attacks of the enemy, which have given them such a tremendous initial advantage, are a brilliant example of naval and aerial coordination. . . . Aircraft took a very forward part. The enemy has been able to employ land-based planes throughout all his advances. In most instances, the planes which have played so vital a part in the enemy's success were of the Japanese Naval Air Service—mostly land planes. The enemy was adept in their use—as we found them to be with other weapons as well. Japan's long war with China had provided much experience in amphibious warfare. She prepared her blows long in advance, evidently with thoroughness, and the surprise element gave her forces a tremendous advantage. . . .

" . . . This war is for us an amphibious war. It requires all the armed services acting jointly, and for that reason it is the toughest kind of war, technically, to wage."

b. Comment on Pakhoi Operations.—The Japanese landing operation order quoted in this section was captured by the Chinese during the fighting around Nanning, Kwangsi, in November 1939. It was prepared in the office of the military attaché in China. The order is concerned with the landing operations of the Nakamura Detachment, which was commanded by a major general of that name. A study of it will give an insight into some of the tactics employed by the Japanese in the recent Far Eastern conquests. In view of recent Japanese successes, the following points may be noted with particular interest:

(1) The Japanese made no reconnaissance of the areas they had selected for landing operations until the actual landings began—on the theory, no doubt, that such reconnaissance would reveal the point selected for the landing. However, the Japanese had undoubtedly made reconnaissances of the landing areas in months past by the use of Japanese agents or Fifth Columnists.

(2) A study of the various landing points and movements shows that the Japanese used flanking and infiltration tactics similar to those used later in the Malayan campaign.

(3) Naval aircraft closely supported the landing operations, seeking out enemy defenses, movements, and strength.

(4) The importance of identification of friendly troops without confusion was emphasized by the Japanese. It will be noted that instructions were given units

to display their "Rising Sun" flags toward the sky in order that Japanese air forces would not mistake them for Chinese troops.

(5) That the Japanese live off the areas they invade so far as possible is borne out by instructions issued to commanding officers directing the procuring of all the supplies possible locally—"to reduce transportation costs," as the Japanese put it. When the Japanese landed, they carried enough rations to supply each soldier for 6 days.

(6) The instructions given in appendixes Nos. 4 and 5 relative to collection and dissemination of intelligence information are very thorough and give a good insight into Japanese intelligence techniques. Of particular interest are the instructions showing the reconnaissance expected of naval planes.

(7) It should be borne in mind that the number of troops opposing the Japanese in this instance provided them with relatively little resistance.

c. Japanese Strength.—The approximate strength of the Nakamura Detachment was as follows:

Headquarters 21st Infantry Brigade, 5th Division (10 officers and enlisted men).

21st Infantry Regiment (3 battalions, each with 4 rifle companies and 1 machine-gun company—2,716 officers and enlisted men).

Brigade and regimental detachments:

Infantry gun (75 officers and enlisted men).

Signal (60 officers and enlisted men).

One battery of Field Artillery (about 175 officers and enlisted men—4 guns, 4 sections, headquarters detail, combat train).

One battery of Mountain Artillery (about 175 officers and enlisted men—4 guns, 4 sections, headquarters detail, combat train).

One engineer company (about 170 officers and enlisted men—4 platoons).

One mounted platoon (about 20 officers and enlisted men—2 squads).

Medical troops (about 60 officers and enlisted men).

d. Base of Operations.—The landing was based on Sanya Bay* and for the attack on Nanning two other detachments (Oikawa and Tatsumon) are mentioned. These latter also are believed to have been units of the Japanese 5th Division.

e. Outline of Plan.—The Japanese plan is broken down into the following subheads:

- (1) Object.
- (2) Disposition of the landing party.
- (3) Movement of transports.
- (4) Reconnaissance in the vicinity of the landing areas.
- (5) Landing operations.
- (6) Coordination of naval aircraft.
- (7) Antiaircraft and light control.
- (8) Signal communication.
- (9) Rations.
- (10) Miscellaneous.

*Sanya Bay is located on the southern end of Hainan Island, approximately 215 miles east of the mouth of the Yuhung River, where the landing operations began.

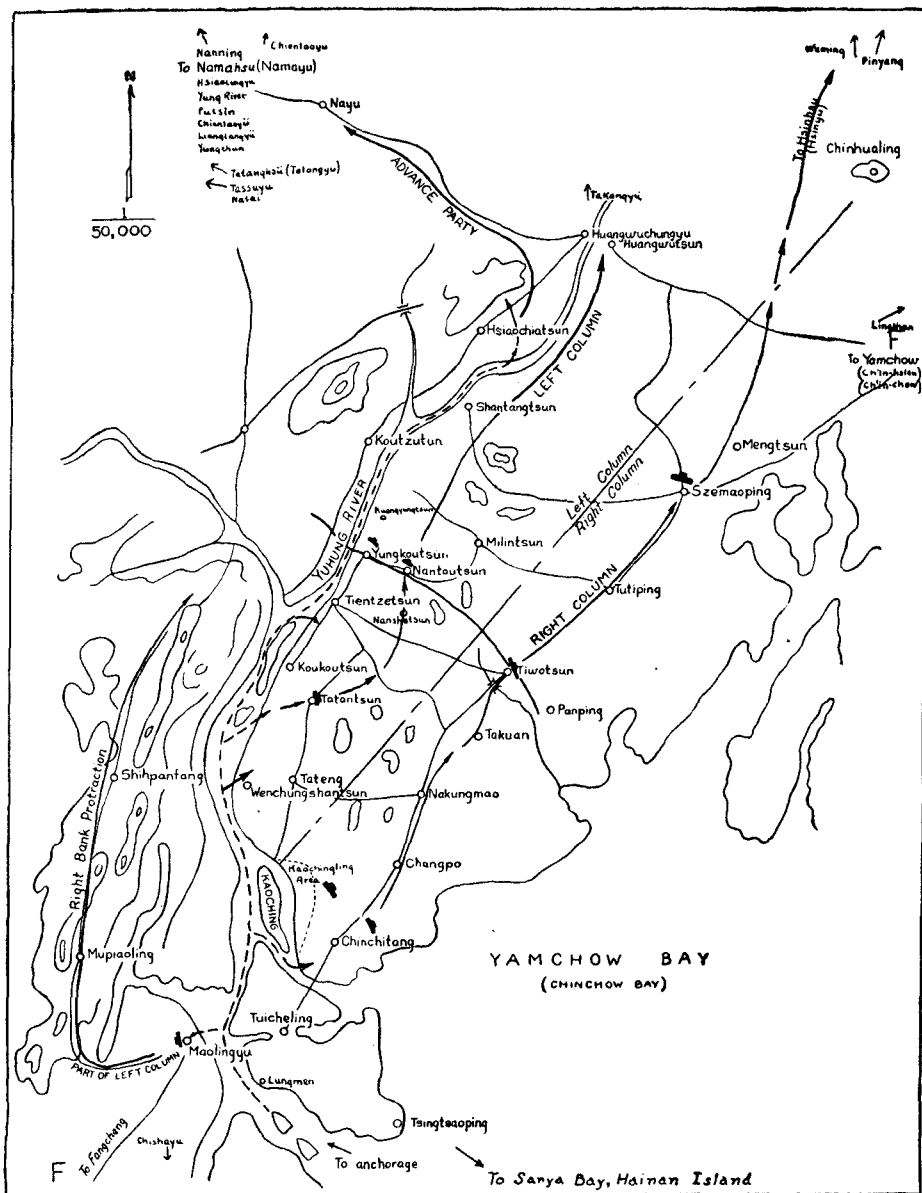


FIGURE 1.—Sketch map showing landing of Nakamura Detachment.

2. Plan of Landings

The Japanese order dealing with the landing operations is as follows:

"a. *Object.*—This Detachment will land by force on X date, the right column in the neighborhood of Chinchit'ang (see figs. 1 and 2) and the main body in the

area north of Wench'unghshants'un. After landing at these two places, the Detachment will proceed rapidly to the Tiwots'un-Yungkoutsun line, and, arriving at this line, will make preparations for a further advance towards the line joining Namahsu and Hsinhsu, south of Nanning.

"As soon as the troops land, an advance party will be sent with dispatch in the direction of N* (Nanning).

"b. *Disposition of Landing Party* (see Appendix No. 1)

"c. *Movement of Transports*

"The transports assemble at M (Sanya Bay, Hainan Island) at 12 o'clock on the fourth day before X day (the landing date). They leave from that place in the morning two days later and anchor at the 2d anchorage about 6 miles southeast of C (Ch'ishayu), at 4 o'clock a. m. on the X day.

"The transports will proceed, as soon as the first landing group has marched off, to the 4th anchorage (southeast of D (Lungmen)).

"d. *Reconnaissance in the Vicinity of the Landing Areas*

"No reconnaissance will be made in the neighborhood of the landing places while the Detachment is still aboard ship.

"e. *Landing Operations*

"(1) The first landing group will commence landing operations at 7 o'clock on X date. After they take to the landing boats, they follow the guidance of naval boats to the mouth of B (Yuhung River) where the Advance Party and the Right and Left Columns will land simultaneously.

"(2) The second and subsequent landing groups will then move to the 4th anchorage on board the transports and effect landing operations there.

"(3) For the landing order and the allotment of boats, see appendix No. 2.

"(4) A boat detail, consisting of a number of river boats from each transport will sail upward from the 2d anchorage to the places of landing, as shown in the sketch map (fig. 1).

"f. *Coordination of Naval Air Force*

"(1) Reconnaissance by naval planes will be made after, but not before, the commencement of landing operations.

"(2) In the support of the landing operations, naval aircraft will attack enemy troops and positions.

"(3) It is important that first-line troops clearly mark their locations. To avoid attacks by friendly planes, the patrols and smaller units are required to identify themselves with Rising Sun flags displayed toward the sky.

"(4) Aircraft will refrain from bombing villages around the landing places unless such action is tactically required.

"g. *Antiaircraft and Light Control*

"(1) *Antiaircraft*

"(a) Naval vessels and planes will repulse any enemy air attack that may be encountered in the course of the operation.

"(b) Transport crews will not make use of their "self-defense" armament unless the convoy ships have opened fire and only upon order of the convoy commander.

*See Appendix No. 3 of the order, page 14, for all abbreviations of places mentioned in this order.

"(2) Light control

"(a) Ordinary light control regulations govern during the nights the transports remain in M (Sanya Bay).

"(b) The emergency (combat) light control regulations will be in effect as soon as the transports leave M (Sanya Bay), whether under way or at anchor.

"(c) Ordinary light control again after X date.

"h. Signal Communication

"To be executed as per 'The Detachment's Signal Plan' in a separate book and also 'The Provisions of the Signal Contact Agreement'.*

"i. Rations

"(1) During the landing operations troops will bring with them the day's noon meal.

"(2) After landing, they will depend upon the field rations brought along by their respective units.**

"(3) In spite of the fact that rations will be forwarded through the divisional headquarters, the troops will make as much use as possible of the local production in order to reduce transportation cost.

"(4) The troops will carry the fixed quantity of ammunition to be later replenished by the divisional transport service.

"j. Miscellaneous

"(1) Gas masks will be left at the place of landing, to be cared for by special details from each unit. These will be forwarded to the front when transportation facilities are available.

"(2) All other matériel left behind at the landing place will be in charge of men from the unit concerned for custody and protection. This will be forwarded to the front, when feasible.

"(3) Abbreviations for place and feature names used in the present campaign are shown in Appendix No. 3.

Appendix No. 1

"LANDING DISPOSITION OF NAKAMURA DETACHMENT

(Major General Nakamura, commanding)

"THE ADVANCE PARTY:

"Commander: Major Higashi

"Troops: 1st Battalion, 21st Infantry (less 2d and 3d Companies and one platoon of machine-gun company)
One squad of mounted platoon
One platoon of engineer company
Signal detachment
Two folding boats

*These were not found with the captured order.

**The iron and field rations and those in the heavy baggage total 6 days' supply.

"Transports: Taian Maru (tonnage 5,500) and Ishin Maru (tonnage 4,955)
"Landing Place:* The neighborhood of Huangwuchungyu on the left bank of Yuhung River.
"Action: Sail upward along Yuhung River to the neighborhood of Huangwuchungyu and land there by force. Then march rapidly toward the area south of N (Nanning) via the route Huangwuchungyu-Natai-Tassuyu-Tatanghsu-Namahsu. Reconnoiter enemy positions in that area and cut the traffic of Yung River (south of Nanning) at the same time.

"THE RIGHT COLUMN:

"Commander: Major Morimoto
"Troops: 3d Battalion, 21st Infantry (less 11th Company)
 Half of Regimental Infantry Gun Detachment
 One mounted squad
 One platoon of engineer company
 Signal detachment
"Transports: Tomiura Maru (tonnage 3,821), Tateishi Maru (tonnage 3,800), and Yuki Maru (tonnage 3,170).**
"Landing Place:
"Action: Troops on board Tomiura Maru** land at the western flank of Chinchit'ang, the rest in the vicinity of Wench'ungshants'un.
 1. Immediately after landing, send a detachment in the direction of Szemaoping and (about 3 miles northeast of Tiwots'un) to reconnoiter the enemy stationed at Ch'inhsien.
 2. The main body will occupy the Kaochingling area after landing, then move with dispatch to the neighborhood of Tiwots'un and occupy it. Any enemy attack will be repulsed, in order to facilitate the landing of the Detachment's main body.
 3. The Right Column will advance on Hsinyu by way of Tiwots'un-Hsiaotungyu-Kungjungyu-Hsinyu. For this reason, the fording point across Yuhung River should be definitely reconnoitered. The advance will be authorized in another order later.

"THE LEFT COLUMN: (Major General Nakamura, commanding)

"1. Headquarters Detachment:

"Troops: Headquarters of the 21st Infantry Brigade Signal Detachments
"Transport: Taito Maru (tonnage 4,400)
"Landing Place: Area north of Tateng.
"Action: Halt for the time being where landed. When the first line troops have marched off and the subsequent troops have com-

*See figures 1 and 2 for places mentioned in landing operations.

**These vessels also carry matériel and troops of the Left Column.

pleted landing, push on to Kuangyungstun. The Brigade Telegraph Company will radio communication with the Advance Party and the Right Column. The Signal Company will maintain radio communication with divisional headquarters.

"2. Advance Guard:

"Commander: Major Miyamoto

"Troops: 2d Battalion less 7th and 8th Companies and half (one platoon) of the Machine-Gun Company

"Landing

Place: North of Tateng

"Action: After landing operations have commenced (the boats continue sailing up the river), the advance guard will be placed under the direction of Unit Commander Miki.

"3. Main Body:

"Commander: Major General Nakamura

"Troops: 1st Battalion, 21st Infantry (2d and 3d Companies and $\frac{1}{2}$ Machine-Gun Company)
2d Battalion, 21st Infantry (7th and 8th Companies and $\frac{1}{2}$ Machine-Gun Company)
3d Battalion, 21st Infantry (11th Company)
 $\frac{1}{2}$ Regimental Infantry Gun Detachment
Signal Detachment
2d Battery of 5th Field Artillery Regiment
One battery of Mountain Artillery
One company (less two platoons) of 5th Engineer Regiment
Medical detachment, one stretcher company and a number of medical personnel.

	<i>Tonnage</i>
"Transports: Taian Maru	5, 500
Ishin Maru	4, 955
Yuki Maru	3, 168
Tateishi Maru	3, 800
Tomiura Maru	3, 820
Kokushin Maru	4, 000
Kotsui Maru	4, 000
Fukuyo Maru	5, 463

"Landing

Place: Area north of Tateng

"Action: A. 21st Infantry:

1. The 21st Infantry and the advance guard will sail up the river to the north of Wench'ungshants'un and land there by force. Part of this detachment will be sent with dispatch to occupy the area near Nanshetsun and up to Yungkoutsun in cooperation with the Right Column. The main body will assemble in the vicinity of Kuangyungstun.

2. Occupy Maolingyu with a detachment carrying out flank protection on the right bank of Yuhung River with special vigilance toward Fangcheng. As soon as the first landing group passes Maolingyu, this detachment returns to the main body.*
3. Part of the infantry troops with engineer troops attached will land near Huangwuchungyu in the wake of the Advance Party to perform river reconnaissance and protect the main body when crossing the river.
4. The 21st Infantry will be under Major General Nakamura's direct command after landing.
5. The Left Column will advance on Namayu along the same route taken by the Advance Party.

B. Artillery:

1. Having occupied a position near the landing place, the mountain artillery will prepare coordinating fire for both columns. In case that no opposition is encountered, this unit will assemble near the landing place and prepare to advance with the main body.
2. The field artillery (2d battery) will limber up at the landing place and await orders to advance.

C. Engineering troops:

1. A detachment will be detailed to make necessary repairs at the landing place and to assist building in an artillery position.
2. The remainder will reconnoiter and repair the route to Huangwutsun and also prepare for river-crossing action (across Yuhung River).

D. Medical Service:

1. One detachment will maintain a dressing station in the neighborhood of the landing place.
2. The remainder will advance with the main body.

“REMARKS: Boundary between columns:

The line from the northern end of Kaoching Island to the fork road about 1½ miles west of Szemaoping, and to Chinhualing (about 3 miles east of Huangwutsun), will form the boundary between columns.

* According to the maps, the Japanese consider the west bank as the “right” bank, and this flank column passes west of Maolingyu and marches northward.

BOAT ASSIGNMENT

LANDING ORDER		Name of Vessels	Boats allotted	
First Landing Group*	Second & Subsequent Landing Groups **		Large	Small
(Brig Hq); 2nd Bn Hq; 5th & 6th Cos ½ of MG Co; One Signal Sqd; Part of Brig Inf Gun Det;	Remainder personnel, horses and matériel.	The Second Group of Ships	T a i t o Maru.	6 5 1 1
(Regt Hq); One Signal Sqd; 1st Bn Hq; 1st & 2nd Cos; ½ of MG Co; One Mtd Sqd	----- ditto -----		T a i a n Maru	6 7
3d & 4th Cos; ½ of Regt Inf Gun Det, Part of Brig Inf Gun Det; ½ of 1st MG Co; One Plat Engr Co; One Mtd Sqd	----- ditto -----		I s h i n Maru	6 7
7th & 8th Cos; ½ of 2nd MG Co ½ of Regt Inf Gun Det; One Plat Engr Co	----- ditto ----- & ½ 2d F A Battery		Y ū k i Maru	6 7
3d Bn Hq; One Signal Sqd; 9th & 10th Cos; ½ of MG Co; Part of Brig Inf Gun Det	----- ditto ----- & one sec of 2d Btry		Tomiura Maru	5 8
11th & 12th Cos; ½ of 3d MG Co; One Plat of Engr Co; Medical personnel	----- ditto ----- One sec of 2d Btry; Main body of Medical Personnel		Tateishi Maru	5 7
1 Engr Platoon Consisting of Brigade Construction River crossing and units	Remainder personnel, horses & matériel		Fukuyo Maru	4 4
One section of the mountain Battery	3 section of the Mountain Battery		Kokutsu Maru	4 3

Notes: *Time of landing operations: 7 a. m. on X date at the mouth of Chinchow Bay.

**Time of landing operations: afternoon of the same day at Lungmen.

Appendix No. 3

"ABBREVIATIONS FOR PLACE NAMES USED IN THE PRESENT CAMPAIGN

"Abbreviation	Place Name	"Abbreviation	Place Name
A-----	Mouth of Chin River*	G-----	Chinchow
B-----	Mouth of Yuhung River	L-----	Haikow (Hainan Island)
C-----	Ch'ishayu	M-----	Sanya Bay (Hainan Island)
D-----	Lungmen	N-----	Nanning
E-----	Southern shore of Peihai	T-----	Peihai (Kwangtung)
F-----	Chinchow Bay	K-----	Hainan Island

*Not referred to in the body of the order.

Appendix No. 4

NAKAMURA DETACHMENT'S PLAN FOR COLLECTION OF INTELLIGENCE

Nakamura Det Hq
November 9, 1939

Object: To collect promptly all essential information required for the
attack of strategic points in the environs of Nanning.

1. Information required:

		1st Period (for landing action)	2d Period (preparatory period)	3d Period (for attack of N)
Advance Party	along the main route of advance of Left Column	<ol style="list-style-type: none"> 1. waterway condition of Yuhung river & enemy situation along it. 2. re enemy near Huangwuchungyu especially road and fording condition. 	<ol style="list-style-type: none"> 1. road destruction & enemy situation along Huangwuchungyu — Tassuyu — Tatangyu — Namayu - N. (To be reported in the course of advance) 2. any enemy position near Namayu & on right bank of Yung R. to the west of N. 3. re the fording point across Yung R. & river crossing material. 	<ol style="list-style-type: none"> 1. re enemy defense near N. 2. road condition of N-Pinyang and N-Wuming. 3. re N airdrome. 4. re telegraph and telephone lines near N.

The Left Column	The Right Column	Reconnaissance in respective sectors		
		1st Period (for landing action)	2d Period (preparatory period)	3d Period (for attack of N)
		<ol style="list-style-type: none"> 1. re enemy situation in vicinity of landing place of Hq. of 21st Inf., esp. feasibility of roads for passage of wagons and horses. 2. Yungkoutsun-Huangwutsun rd. 3. re enemy advancing northward from Fangcheng, if any. 4. re river condition near Huangwuchungyu & any fording material. 	<ol style="list-style-type: none"> 1. road destruction & enemy position along Tassuyu-Tatangyu-Namay. 2. road damage on Tatangyu - Nachenyu* - Shihtzukou*-N road. 3. situation near Namayu & on right bank of Yung R. south of N; any enemy positions there. 4. crossing point of Yung River. 	Same as above.
		<ol style="list-style-type: none"> 1. enemy situation near Chinchitang & river & terrain near landing place. 2. enemy situation at Chinchow. 3. damage to bridges between Chinchow & Chinchitang. 4. condition of telegraph & telephone lines. 	<ol style="list-style-type: none"> 1. enemy situation near Takangyu & Hsiaotungyu. 2. condition of Takangyu-Hsiaotungyu - Hsinyu Road. 3. enemy positions near Hsinyu. 4. enemy situation near Lingshan (to be reported by spies). 5. condition of Yung river fording point, & fording material. 	<ol style="list-style-type: none"> 1. re enemy defense near Chientaoyu east of N. 2. condition of N - Yungchun road. 3. waterway of Yung River. 4. enemy situation near Putsin, Chientaoyu, Liangtangyu & Yungchun (by spies). 5. condition of telegraph & telephone line.

*These villages are not shown on the maps.

2. Methods of collecting intelligence:

- a. By scouts.
- b. From prisoners, especially captured higher ranking officers.

- c. Local press.
- d. Annuals and other literature in occupied towns.
- e. Aerial reconnaissance.
- f. Captured enemy's documents.
- g. Estimate and judgment.

3. *Notes for the submission of reports:*

- a. As soon as something of importance is learned, report it even in part, by radio or other means. Don't wait for the complete text.
- b. That which is intended for record will be compiled into a connected thesis for oral or written report.
- c. Any data, topographical or military, that is not immediately needed for the present campaign may be reported after the campaign is over.
- d. Sources should be mentioned in the report.
- e. In sending reports by radio, observe the "Nakamura Detachment's Signal Correspondence Agreement".

4. *Remarks:*

- a. All units are required to obtain and report, aside from that listed above, information of important military or topographical nature.
- b. The boundary for the collection of intelligence for the two columns is as follows:

The line joining *Chinhualing* (about 3 mi. east of *Huangwutsun*, see map), *Lotzuyu*,* *Ssupingyu*,* *Taleitsun* (5 mi. west of *Hsinyu*), and *Ssu* * (4 mi. southeast of *Nanning*), is included within the area for the Left Column.

Appendix No. 5

"RECONNAISSANCE EXPECTED OF NAVAL PLANES**

(Based on the 5th Division's plan
for the collection of intelligence)

"Data desired

Whom to inform

"1st Period: (Landing date: approximately Nov. 15)

- "1. Enemy situation in the vicinity of the landing places: B, C, D.***

*These villages are not shown on the maps.

**See figure 2 for map prepared by the Military Intelligence Service to aid in the interpretation of the Japanese aerial reconnaissance.

***B=Nakamura Detachment; C=Oikawa Detachment; D=Tatsumon Detachment.

- a. Any enemy troops?
- "2. Any enemy troops marching southwestward from Hsiaotungyu?
- a. Are the enemy forces near Takangyu and Hsiaotungyu pushing toward B? Or are they making defensive preparations? Or are they retreating? If they are retreating, to which direction?
- "3. Enemy situation in the vicinity of Fangcheng
- a. Any enemy positions near Fangcheng?
- b. Are enemy troops advancing toward C? Or toward B?
- "4. Enemy situation near N and their transportation activities, especially whether or not they are preparing to retreat.
- a. Is the enemy near N advancing southward?
- b. If so, toward which side of Nakamura and Oikawa Detachments?
- c. If they are retreating, in which direction?
- d. Do they make use of motor vehicles for transporting troops and supplies?
- "5. Reconnoiter enemy situation at Lungchow, Kweihsien, and Peihai.
- a. Find out from the above three areas if there are enemy troops (Chinese) advancing toward the Division (the 5th Japanese Division). If there are, what kind of troops, strength, and route of march?
- "2d Period: (The preparatory period for the attack of N is roughly November 16-18)
- "1. Enemy situation on the route of advance of the Nakamura and the Oikawa Detachments, and the location of these detachments.
- a. Where is the main strength of the enemy?
- b. Are the small streams fordable?
- c. The location of the advance parties of the two detachments?
- "2. Enemy situation at N and on the right bank to the south thereof. Any obstacles?
- a. Are the enemy troops near N offering resistance?
- Report first to Nakamura Det, next to divisional intelligence officer.
- Report first to Oikawa Det and the Cav Det, next to divisional intelligence officer.
- Inform the two Dets concerned, then the divisional intelligence officer.
- Inform the Det concerned.
- Inform the Det concerned.
- Inform the Det concerned.
- Inform the two Dets concerned and the Cav Det.
- Inform the two Dets concerned and the Cav Det.

- b. The front of their positions, especially locations of the two wings.
- "3. Condition of Yung River. Inform the two Dets concerned and the Cav Det.
 - a. Any civilian boats in anchorage?
 - b. Any defensive works on the northern bank facing our troops?
- "4. Enemy situation at Kueihsien, Pinyang, Wuming, and especially Lungchow. Inform the two Dets concerned and the Cav Det.
 - a. Strength of enemy troops and the manner in which they are moving about.
 - b. About their main body.
- "5. The Shioda Army Group. Inform Nakamura Det.
 - a. Toward which line are they moving?
 - b. Enemy situation near the Division's battle area.
- "6. Activity of enemy planes.
- "3d Period: (After November 19)
- "1. Enemy's defensive works in the neighborhood of N and his strength. Inform the two Dets concerned and the Cav Det.
 - a. The fortifications on the high ground north of the city wall.
 - b. The defensive works at the airdrome, and arsenal.
- "2. The condition of enemy's retreat. Inform the two Dets concerned and the Cav Det.
 - a. Direction and strength.
 - b. How they are retreating, by water?
- "3. Troop movements in the interior.
 - a. Location and the strength of the main body of enemy troops, especially whether they are offering counterattacks from the northeast or from the high ground in the north.
- "4. Condition of Yung River and the main roads leading to N.
 - a. Condition of boats and fording points of the river.
 - b. Any damage to roads and bridges?
- "5. When the Oikawa Detachment is advancing toward Lungchow, how about the roads? Inform Oikawa Det.
 - Are they good enough? Any hostile opposition on the route of advance?
 - a. Any defensive works in the vicinity of Lungchow?
 - b. Condition of the border (with French Indo-China)."

SECTION II

JAPANESE ARMY TROOP TRANSPORTS*

1. Tonnage Calculations and Probable Troop-Carrying Capacities

The tonnage allowance for troops varies according to the length of the voyage, the route taken, and the season of the year. The following data will provide, however, a useful guide to the tonnage required (in each case a margin is allowed for a certain quantity of stores, coal, ammunition, and vehicles):

a. Personnel and Horses.

	<i>Long sea voyages</i>	<i>Short sea voyages (3 days)</i>
For each man	5 tons	3 tons
For each horse	10 tons	9 tons

b. *Matériel*.—For every 1,000 tons of shipping, various vehicles (loaded), tanks, and other equipment can be shipped as shown in the table below:

Trucks (3-ton)	12
Trucks (30-cwt—approximately 1½ tons)	23
Trucks (1-ton)	40
Tractors (field artillery)	50
Cars	40
Ambulances	30
Howitzers (105-mm)	50
Field guns (37-mm)	100
Tankettes	30
Light tanks	25
Medium tanks	15

*This information was taken from an Australian intelligence summary received recently.

*c. Infantry Division.**—On the above basis, one infantry division would require transports totaling approximately 122,000 tons, divided as follows:

	<i>Tons</i>
15,000 troops (approximately).....	75, 000
39 tanks (light and medium).....	2, 000
72 75-mm guns.....	750
16 105-mm howitzers.....	330
2,000 horses (estimated).....	20, 000
	98, 080

Add 4 percent of gross tonnage for carrying stores, heavy artillery,
etc. (approximately)..... 24, 000

Total tonnage required for one infantry division..... 122, 080

d. Ship Dimensions in Relation to Tonnage.—The length, breadth, and draft of vessels in relation to tonnage is given in the following table:

<i>Draft (feet)</i>	<i>Length (feet)</i>	<i>Breadth (feet)</i>	<i>Approximate tonnage</i>
15	230	33	1, 000
19	280	39	2, 000
21	330	44	3, 000
23	360	48	4, 000
25	390	51	5, 000
26	420	53	6, 000
27	440	55	7, 000
28	450	57	8, 000
28	460	58	9, 000
29	470	59	10, 000

*The strengths of various Japanese units are approximately as follows:

Infantry division.....	15,000 men.
Infantry brigade.....	10,000 men.
Infantry regiment.....	3,400 men.
Mobile mixed brigade.....	8,000 men.
Meehanized mixed brigade.....	8,000 men.
Independent mixed brigade.....	12,000 men.

SECTION III

SPECIAL NOTES ON THE USE OF FIELD ARTILLERY

1. On Bataan Peninsula

a. General.—The use of field artillery, particularly 155-mm howitzers, was a vital factor in the 3-month defense of Bataan Peninsula. Large-scale Japanese attacks were broken up several times by concentrated and well-directed artillery fire. United States firing techniques have proved their worth conclusively and have led United States artillery officers on Bataan to report that they could “make no suggestions for the improvement of the methods taught at Fort Sill.”

b. Observer's Report.—On Bataan, massed artillery fire, controlled by a fire-direction center connected with all observation posts available, has been proved highly effective. The enemy has been very sensitive to heavy artillery concentrations, particularly when they came as a surprise. On every occasion when artillery was used with audacity, the Japanese were checked and seemed completely bewildered. In many situations that seemed desperate the artillery has been a most vital factor, and 155-mm howitzers have proved the most effective pieces.

2. In the Malayan Campaign*

a. General.—A comparatively small amount of field artillery was used in the Malayan Campaign, because most of the country is marshy and has very few roads. The British employed some artillery effectively in defense of beaches. The Japanese did not use artillery, however, until about 6 weeks after they started the campaign, and even then most of their pieces are believed to have been captured from the British. Singapore was the first Malayan city extensively shelled by field artillery.**

b. Problems Confronting the British.—(1) *Communication.*—(a) Wire was cut in forward zones by infiltrating Japanese or native partisans almost as soon as it was laid. After cutting the wire the enemy often hid nearby and fired on the line guards when they approached.

(b) A considerable amount of wire was lost in rapidly moving withdrawals.

(c) As a result of (a) and (b) above, the British relied more and more on radio communication*** during the latter phases of the campaign.

*As reported by a United States field artillery observer.

**A Japanese document captured recently in Burma reveals that batteries of the 55th Mountain Artillery—part of the newly organized Japanese 55th Division—have only three sections, whereas usually the Japanese use four sections to the battery.

***For details on Japanese radio communications, see MID Information Bulletin No. 8, *Notes on Japanese Warfare*, February 7, 1942.

(d) British division artillery commanders had no communications of their own and were forced to use divisional nets.

(2) *Japanese Infiltrations*.—Infiltration tactics used by the Japanese were a constant menace to artillery, particularly against columns on the roads. Japanese parties infiltrated between the elements of the columns, thus preventing them from advancing or retreating. Personnel were forced to abandon guns and make way to the rear through the jungle. Whole regiments of guns were captured or destroyed in this manner. To guard against these tactics, all artillery personnel have been instructed to carry rifles. Division of batteries into sections or platoons with infantry in the front and in the rear has been found to be desirable.

c. *Targets*.—The principal use of British artillery in Malaya was against targets of opportunity, and practically all effective fire was by direct laying. To secure targets of opportunity, the artillery was placed among the forward elements. The targets included roadblocks, tanks, and motor vehicles. Speed in opening fire was very important and use of fewer motor transports on roads was very helpful. These advantages were secured—at least in a large measure—by using self-propelled mounts for the pieces.

d. *Beach Defenses*.—Use of field artillery in defense of beaches was a tactical success in Malaya. Its fire alone drove away one Japanese landing force, sinking three transports. On this occasion—contrary to their usual practice—the Japanese attempted to land at a point where they were expected. To provide against Japanese landings in unexpected places, highly mobile reserves of field artillery located centrally to the entire waterfront have proved effective.

e. *"37's"*.—Used as field artillery most of the time, 37-mm antitank guns were valuable against all types of targets in Malaya.

f. *Formations*.—The field artillery formation generally used in Malaya was the British 2-gun "section"—equivalent to two United States sections.

SECTION IV

JAPANESE TACTICS IN MALAYA*

1. General

There is a dangerous tendency among some persons to attribute Japanese war successes to surprise and plentiful supplies. Although these have been helpful, their success has been due primarily to *training, previous war experience, and good discipline and morale*. The necessity for aggressive offensive fighting is stressed in all Japanese training manuals. The Japanese are not merely imitators, as some are inclined to think. They have led the world in development of landing operations and in the design of special landing-craft carriers and assault landing craft. The Japanese Army always has used to the fullest extent the fundamental infantry virtue of marching and fighting, while placing minimum reliance on motor transport. This, coupled with the exploitation of captured enemy motor transport and locally-obtained vehicles—especially bicycles—has given the Japanese a battle technique peculiarly well adapted to the theaters of war in which they have fought. They are quick to adopt foreign techniques to fit their own requirements. That they have studied closely recent German war experiences and have given much thought and preparation to their own peculiar situations has been shown in Malaya in the following ways:

- a. Close coordination between infantry, supporting ground arms, and aviation—all using radio.
- b. Quick and effective air support, including reconnaissance.
- c. Use of noise as weapons of war. Firecrackers and loud mortar bombs were especially effective in jungle country where visibility was poor.
- d. Use of trees as fire positions, thereby gaining an advantage over ground-bound opponents. Each light machine gun appears to be fitted with a spike or similar means of rapidly attaching it to a tree, behind which the Japanese stands and fires the weapon. This method overcomes the screening effect of undergrowth in the prone position.
- e. Exploitation of the tendency of troops to be road-bound, by carrying out encircling movements around them and establishing road blocks in their rear—a technique which often resulted in British loss of guns and transport.
- f. The skill shown in repairing demolished bridges by use of local materials, and in the removal of obstacles by engineer units.

*This section is a summary of Japanese tactics used during the Malayan campaign and the lessons learned therefrom. All of the information came from Australia. The information dealing with ground tactics is based on a training memorandum issued by headquarters of the U. S. Army forces in Australia. That dealing with air tactics is based on Australian intelligence summaries received recently.

2. Fifth Column

Operations of Fifth Columnists in Malaya included the following:

a. A Malay overseer arrested at Alor Star Aerodrome had in his possession airdrome plans, Japanese propaganda, and signaling apparatus.

b. Two coolies walking alone, one wearing a red shirt and the other a white shirt, indicated the proximity of British troops.

c. Vendors of drinks on bicycles, after supplying free refreshments to British troops, signaled to the Japanese by means of a flag, waving it twice and pointing to the troops. This signal immediately brought down accurate mortar fire.

d. Enemy patrols have on at least one occasion been preceded at a distance of about 50 yards by a German dressed in civilian clothes who engaged troops in conversation while enemy patrols came into firing position.

e. Motor transport was on one occasion delayed by a nude local inhabitant who leaped about the road.

f. Telephone operators in the Kedah area were reported to have been the chief Fifth Column agents.

g. It has been reported that rice, salt, and white paper were used on roads to denote the proximity of troops.

h. Enemy landing parties employed Malay guides.

i. Scarecrows, with arms outstretched and covered with red material, pointed to troop positions.

j. Banana leaves laid on roads indicated motor transport parks.

k. Wooden planks laid out as arrowheads pointed to military headquarters.

l. Rice or grass trodden down or cut into the shape of arrows pointed to headquarters.

3. Camouflage

a. *Personnel*.—Japanese military personnel in the theater of operations disguised themselves extensively. Individual camouflage equipment included a body net and a head net, either or both of which could be worn according to circumstances. The body net was 1 by 1½ yards in size. It was made of a greenish-colored straw fiber cord or ordinary twine with a square mesh less than 2 inches in size. The head net was made of the same material and had the same mesh and color as the body net. It was constructed so as to fit snugly over a cap or metal helmet.

b. *Horses*.—A net used to camouflage horses was large enough to hang over the back of the animal from head to tail and down to a point slightly below the girth. It was similar in color and construction to the personnel net.

c. *Machine Guns*.—The machine-gun net was more than 2 yards square. It was the same color as the other nets but was made of heavier material and had a slightly larger mesh.

d. *Artillery*.—A net designed for the artillery gun position was large enough to cover a gun and its detachment. It was attached to the ends of poles or other convenient supports at a height sufficient to enable the gun to be operated unhindered.

e. *Vehicles*.—Paint and local vegetation—with or without nets—were the usual means of camouflaging vehicles. Armored force vehicles normally were irregularly painted in indeterminate shades of khaki, yellow, brown, and green. Motor

transports usually were painted a sandy khaki color, although some were painted like the armored force vehicles. Guns were painted either dark green or in shades also like those of armored force vehicles.

f. Aircraft.—(1) *Fighters.*—A large number of the Japanese fighters were painted jet black in order to absorb as many light rays as possible and thus make them harder to see.

(2) *Type "96" Heavy Bombers.*—Many of these were camouflaged well and were difficult to locate. They had irregular curling lines of light gray and light green over most of the surface.

(3) *Type "97" Reconnaissance Planes.*—They were painted a dark gray all over.

4. Blitz Parties

The principal roles of Japanese blitz parties apparently were to clear the roads of British forces and obstacles and to create confusion deep in their defense set-up. The parties, usually consisting of three to five tanks or armored carrier vehicles, came in waves, each of which generally was led by a medium tank. The leading party moved over roads regardless of opposing forces on the flanks. It generally fired at the opposition but did not stop. Its principal role was to engage vehicles and personnel on the road. Subsequent blitz parties—sometimes as many as four—halted when British troops were encountered and opened fire from the road. Firing usually was high and only slight casualties resulted. The parties did not pursue the attacks a great distance from the road. After brief engagements they moved over the roads farther into British territory to engage other British units in a similar way.

5. Air Tactics

a. Formations.—(1) *Fighters.*—The basic unit used by Japanese Army fighters in Malaya was a diamond of four planes. Naval fighters used a basic unit which consisted of a narrow-angled unsymmetrical V formation of three or five planes. Normally the formation leader pulled out when encountering opposing aircraft and took no part in the actual combat. Presumably he directed the other fighters in the battle by radio—with which most recent Japanese planes are equipped.

(2) *Heavy Bombers.*—In a raid on Singapore Island by heavy bombers, the Japanese employed an unusual formation. The three leaders were in line astern with two lines of six also in line astern on each quarter of the leading flight. Four scattered weavers constituted the rear.

b. Attack Techniques.—(1) *General Air Policy.*—In air action as in ground tactics, the Japanese stress the necessity of the sustained offensive. "By keeping always on the offensive we force the enemy to divert part of his air force to the defensive, thereby weakening him"—so states the preface in a captured Japanese training manual.

(2) *At Kota Bharu.*—(a) In an attack on the Kota Bharu airdrome, four type "O" fighters approached in echelon to port formation at 2,000 to 3,000 feet and peeled off into a deep dive to make an organized front-gun attack. The front guns fired from 1,500 feet down and the planes pulled out at low altitude until sufficient height was gained to make another attack. After the initial dive each plane appeared to act independently. The attack lasted only 5 minutes.

(b) In another attack on the same airdrome, 15 to 20 naval type "96" Mitsubishi sea-scouting fighters used one V of 7 planes with the rest of the planes flying as stragglers. In peeling off, some of the planes carried out a maneuver resembling a spin or aileron turn. They straightened out into a 70° dive with a very sharp pull-out at 800 to 1,000 feet, and dived again after sufficient height was gained. The attack lasted about 10 minutes.

(3) *Maneuvering*.—Japanese fighters in Malaya did not engage in extreme aerobatics. They normally employed dive and zoom tactics in breaking away and in regaining height.

(4) *Deceptions*.—(a) In several instances Japanese aircraft flew high over airdromes to draw antiaircraft fire and searchlights, whereupon a single plane came in at low altitude with navigation lights on and wheeled down to strafe the airdrome. The strafing plane then climbed fast into the nearest cloud.

(b) Later in the Malayan campaign a Netherlands East Indies plane sighted some Japanese launches on the northeast coast with natives towing them and waving a white flag. When the plane went down to investigate, it was shot down by light antiaircraft concealed under the awnings of some of the boats.

6. Lessons on Airdrome Defense

The following comments on airdrome defense were compiled in connection with Japanese attacks on airdromes at Kota Bharu, Gong Kedah, and Machang:

a. *Antiaircraft*.—Light antiaircraft in sizable numbers are needed to protect airdromes from low-flying attacks. Where possible, these guns should be on twin mounts.

b. *Personnel*.—All airdrome personnel, regardless of duties, should be well armed and trained in the use of tommy guns, rifles, and pistols.

c. *Demolitions*.—These should be well planned. At the airdromes execution of the necessary demolitions was extremely difficult because the armament personnel who had been detailed for the tasks were occupied completely with rearming of planes and other duties. In times of emergency this will usually be the case, and a number of station personnel, detailed by name for the duty well in advance, should be trained in executing the demolition. Wherever possible, electrical circuits should be used to save time and personnel.

d. *Slit trench*.—The value of slit trenches was proved conclusively during the bombing and strafing of these airdromes. No casualties occurred to the men in these trenches despite frequent and very low strafing.

e. *Identification of Planes*.—This was difficult because the Japanese used planes similar to the Lockheeds operated at Kota Bharu by the Royal Australian Air Force. In one instance, Japanese planes appeared over the Gong Kedah airdrome at about the same time Royal Australian Air Force Lockheeds were due from Kota Bharu. Not until the Japanese had blasted airdrome buildings were they recognized.

7. Points to be Emphasized

a. *Resisting Landings*.—Landings must be destroyed or repelled at the water's edge. If a beachhead is once established, Japanese excellence at infiltration makes its rapid expansion very difficult to resist. British defenses commonly were in depth from the beaches, and, as a result, practically no landings were repelled or

expelled. The proper method is to attack landing parties with everything available at the time landings are made.

b. Knowledge of Area.—Both officers and men should know the country in which they operate. The strength of units operating in close country is reduced rapidly by detached parties becoming lost and being unable to rejoin commands. Every unit down to platoons should have rear rendezvous points familiar to all members where lost individuals may be assembled. Commanding officers must impress local guides, forcibly if necessary.

c. Liaison Officers.—The British found that the use of liaison officers from lower to higher units was absolutely indispensable. Each battalion should have a liaison officer with regimental headquarters. Orders should be submitted by liaison officers rather than by message. They must have the confidence of the higher commanding officer, and be kept informed of the complete picture at all times.

d. Resisting Infiltration.—Troops must be trained to deal properly with infiltration. Japanese infiltration generally was done by small parties, platoons, or companies with trench mortars and machine guns. The Japanese inserted themselves between elements of British columns. Road blocks of trees or overturned cars were hurriedly constructed and the Japanese covered these road blocks from the roadsides with mortar, machine-gun, and rifle fire. British elements in advance of the road blocks commonly regarded themselves as “cut off” and tried to retreat, whereas advancing elements in the rear of the road blocks fired upon their own troops. The proper method is to train troops in column to disregard infiltration in their rear and to have enemy parties dealt with by elements in the rear of infiltrations.

e. General Qualifications.—For success, the United Nations’ forces should be trained to a high standard of toughness, fighting efficiency, adaptability, discipline, and morale. This type of training is particularly important for modern jungle warfare.

SECTION V

JAPANESE "FLYING COLUMNS"

1. Introduction

The information contained in this section was taken from an Australian intelligence summary which was issued on December 12, 1941. The summary itself was based on a Chinese-prepared booklet compiled from captured Japanese documents. The "Flying Columns" were used extensively by the Japanese against the Chinese.

2. Missions

The principal functions of the "Flying Columns" were listed by the Chinese as follows:

- "a. To threaten our flank;
- "b. To harass and disrupt our rear communications and to interrupt road communications in other areas;
- "c. To threaten our rear;
- "d. To act as advance guard for the main body by occupying important points ahead of the main body;
- "e. To carry out surprise attacks in localities where the enemy is not expected;
- "f. To harass our larger formations, and to facilitate attacks by the enemy's main body;
- "g. To protect the enemy flank and rear;
- "h. To assist the enemy's main body when it is in a dangerous situation;
- "i. To carry out reconnaissance and other duties."

3. Composite Elements

The "Flying Columns" were composed of light and fast combat vehicles and selected personnel, including expert-riding cavalymen, in order to present a hard-hitting, swiftly-moving assault force. They had signal and medical units attached. Although the strength of the "Flying Columns" varied according to the tasks performed, their composition generally was as follows:

- a. 1 section of armored cars:
 - 1 lieutenant in command.
 - 25 enlisted men (approximately) including 1 sergeant as car commander and 1 corporal.
 - 4 light armored cars, each carrying 2 light machine guns.
 - 4 trailers.
 - 1 motorcycle, with attached side car.
- b. 1 section of tanks (light or medium):*
 - 1 lieutenant in command.

*"Flying Columns" do not necessarily have tanks attached.

- 30 enlisted men (approximately).
- 3 tanks.
- 1 motorcycle, with attached side car.
- c. 1 squadron of cavalry (4 troops):
 - Officers (number unknown but believed to be 5).
 - 165 enlisted men, including 2 sergeant majors, 1 noncommissioned gas officer, 1 noncommissioned veterinary officer, 1 noncommissioned supply officer, two buglers, and 1 medical orderly.
 - 155 horses (approximately).
 - 4 light machine guns.
- d. 1 company of infantry (3 platoons, with 1 platoon, or more, of heavy machine guns attached):
 - 5 officers.
 - 189 enlisted men.
 - 12 light machine guns.
 - 129 rifles.
 - 194 bayonets.
 - 18 short rifles.
 - Grenade dischargers (number unknown)
- e. 1 car section:
 - 1 lieutenant in command.
 - 15 drivers.
 - 15 assistant drivers.
 - 2 light machine-gunners.
 - 1 mortar gunner.
 - 1 ammunition carrier.
 - 15 cars.
 - 1 machine gun.
 - 1 mortar.
- f. 1 section of engineers:
 - Includes 5 noncommissioned officers.

4. Long-Distance Reconnaissance Columns

The "Flying Columns" frequently sent temporary reconnaissance columns from their own organizations to make long-distance reconnaissances. The composition of these branch columns was as follows:

Commander.....	Captain.
Infantry.....	2 platoons (each platoon, 4 light machine guns).
Machine gun.....	1 section (5 noncommissioned officers).
Infantry guns.....	1 battery (each battery, 2 sections).
Tanks.....	1 section.
Cars.....	1 section.
Engineers.....	1 section (5 privates).
Wireless.....	1 section.
Medical section.....	1 unit (3 privates).

5. Resisting "Flying Columns"

a. As a Whole.—The Chinese have made the following suggestions for countering Japanese "Flying Columns":

(1) Determine composition and objectives in order to arrange an adequate defense.

(2) Ascertain position of the Japanese main body of troops and their total strength.

(3) Be sure adequate means of communication are set up.

(4) Ascertain the farthest point reachable by the "Flying Column," calculate distances and times between points likely to be traversed, and determine the capability of the enemy to reach certain points at certain times.

(5) Maintain constant and thorough reconnaissance.

(6) Provide thorough protection.

(7) Place obstructions in strategic roads and mine roads which the enemy's vehicles are most likely to pass.

(8) Try to pick battleground disadvantageous to the enemy—such as wet places, woods, plowed fields, high hills, and deep ravines if the enemy's forces are mechanized.

(9) Avoid a frontal attack if possible.

b. As Individual Units.—(1) When opposing a cavalry force have all infantry weapons fire heavily upon the enemy, in cooperation with artillery fire.

(2) In countering armored cars or tanks, use all available mechanized units and infantry machine guns with special armor-piercing ammunition. If a shortage of armored vehicles and antitank guns exist, use field guns, mortars, machine guns, and hand grenades. If possible employ machine guns in pairs, and open fire at about 500 yards, at a time when the enemy vehicles are traversing uneven ground and rearing up so that the fire may strike underneath. When at close range, direct the fire at the observation slit.

(3) In attacking the enemy's infantry following its armored vehicles, have friendly infantry and attached troops open a very heavy fire.

SECTION VI

JAPANESE EQUIPMENT AND TACTICS

1. Equipment

a. Two-way Radio.—An inspection of a Japanese two-way aircraft radio set removed from a crashed plane showed that it was designed and constructed to perform very efficiently. Good materials and components were used throughout. Most of the parts appeared to be of Japanese manufacture and were apparently copies of United States components. The construction showed both United States and German influence. The set has a positive radius of communication of about 450 miles. The reception and transmission range is 300 to 500 kilocycles and 5,000 to 10,000 kilocycles, respectively. The set was detached when found and it is not known from what type of plane it came. However, previous information indicated that the set was designed for use in light bombers and long-range fighters.

(1) *Receiver.*—The receiver is a superheterodyne and has—

(a) One radio-frequency stage, first detector; one intermediate frequency stage, second detector; power output.

(b) Plug-in coils for various bands of frequencies.

(c) Beat-frequency oscillator for continuous-wave telegraphy.

(2) *Transmitter.*—The transmitter, which could not be removed from the mounting chassis, has the following characteristics:

(a) Plug-in coils for various bands of frequencies.

(b) Crystal-controlled (6,200 kilocycles).

(c) Continuous-wave telegraphy and voice transmission. The voice can be transmitted straight or "scrambled."

(3) *Generator.*—No clue could be obtained as to whether the generator was run by a windmill or a battery, but the voltage regulator (bottom right-hand corner of transmitter panel) was fitted in the very best technical manner. The supply of the fitting indicates that the generator may be battery-driven.

b. Bombs.—(1) *Parachute Bombs.*—The British Navy reports that the Japanese are dropping delayed-action incendiary bombs by parachute. The bombs have a delayed action up to 12 hours. Painted black with a small red band 6 inches from the nose, they are 6 inches in diameter and 3½ feet long.

(2) *Flame Bombs.*—The Japanese recently began using over Corregidor a new type of bomb, which burst with a huge flame. Two of the bombs dropped on April 3 exploded about 500 feet above the ground.

c. Artillery.—(1) *240-mm Guns.*—Huge 240-mm guns were introduced into the Far East conflict recently by the Japanese, who fired them at island fortifications held by the United States at the entrance to Manila Bay. The guns were

stationed at points on the south side of the bay. It was known previously that the Japanese possessed a relatively small number of 240-mm guns for railway and general-siege purposes. The railway guns are capable of being transported on either standard or narrow gage. The road and railroad net in the Philippines is such that either the railroad type or the general-siege type could have been used.

(2) *240-mm Shell*.—A Japanese 240-mm shell recovered in the Philippines has the following characteristics:

Weight.....	about 440 pounds.
Fuze.....	base type, made of brass.
Filling.....	TNT.
Projectile casing.....	Manufactured in 1941, base not streamlined, with narrow rotating band near base.

d. Tanks.—A light, 7-ton tank being used by the Japanese in Burma was erroneously labeled as tankette M2595 in TM 30-480 (Handbook on Japanese Military Forces). The tank is operated by a crew of three and is armed with a 37-mm gun and two machine guns. It has four bogie-wheel suspensions on two bogie-wheel tracks, and gets its drive off the front sprocket wheel. Radio control is believed to be limited to commanders' tanks. It is known that each individual tank is not radio-controlled. The armor of the tank is $\frac{1}{4}$ to $\frac{3}{8}$ inch thick.* Other specifications are listed in TM 30-480 and are approximately correct except for the weight and crew.

e. Motor Torpedo Boats.—The Japanese were reported several months ago to be building 70 motor torpedo boats. Some of them probably have been completed. Characteristics of the boats are as follows:

- (1) Length: 32 feet 6 inches to 49 feet.
- (2) Beam: 6 feet 6 inches to 9 feet 9 inches.
- (3) Body: Flat bottom, steel frame, and wood planking.
- (4) Motor: Radial-cooled aircraft engine with reduction gear and angle drive up to 400 ground-maximum horsepower.
- (5) Armament: 2 torpedo tubes mounted on each side, 4 depth charges, and 1 machine gun.
- (6) Crew: 3 or 4.
- (7) Speed: 52 miles per hour or over.
- (8) Endurance: 10 hours at full speed if about 1,150 gallons of gasoline are carried.

f. Disposable Fuel Tank.—An auxiliary fuel tank dropped by a Japanese fighter plane at Port Moresby had a capacity of 70 gallons.

2. Tactics

a. Bombing Attacks.—Japanese type "96" twin-engine heavy bombers used 500- to 1,000-pound bombs in high-level attacks on United States ships in the Netherlands East Indies area. Each plane dropped one and frequently two bombs on each run—apparently every bomber carried four 500-pound bombs or two 2,000-pound bombs, or a combination of the two. One ship suffered a direct hit by a high-explosive bomb believed to weigh 500 pounds. The effective blast of

*British 37-mm fire proved highly effective against the tank.

the hit was 50 feet. The bomb was fuzed to produce a delay of about 15 feet, exploding at the third deck level. It made a hole 10 inches in diameter when it hit the deck. An armor-piercing bomb, of a much heavier type and believed similar to some used at Pearl Harbor, struck another United States ship. Fuzed for delay, it was so thick-walled as to suggest a converted-gun projectile. The shell first struck the mast and then exploded on the main deck. Downward damage was confined to one deck height and the blast effect was not great. Had the fuze not been actuated when the shell struck the mast, the projectile would have penetrated the ship's after magazine and caused much greater damage. The holes showed it to be 14 inches in diameter. The fragments included large pieces which caused great damage and heavy casualties.

b. Torpedo Planes.—Torpedo-bombing aircraft approached in formation at about 6,000 feet, gradually losing height in a gentle dive and simultaneously forming into a ragged line astern. Torpedoes were dropped at from 1,000 to 2,000 yards from the target and at heights up to 250 feet. After the torpedoes were released, the attacking aircraft flew straight ahead across the bows of the ship in a gentle climb.

c. Bomber Flights.—Accurate antiaircraft fire at Corregidor forced the planes to bomb from altitudes over 27,000 feet. In a recent air raid two bombers flew over and were shot down almost simultaneously by antiaircraft fire.

d. Artillery on Barges.—In an attempt to land on the east coast of Bataan, the Japanese mounted 75-mm guns and smaller weapons on barges. Effective artillery fire from United States and Filipino troops sank several of the barges and forced others to withdraw without making any landings. Japanese losses were believed to have been severe.

e. Smoke Screens.—After landing operations the Japanese on several occasions have used smoke screens to facilitate their fast infiltrations into conquered territories.

f. Destruction of Planes.—In New Guinea the Japanese are believed to have adopted a plan to destroy completely on the ground any of their planes which have been shot down. Australian pilots at Port Moresby report that in each raiding formation the Japanese apparently detail one plane to dive-bomb and destroy any crashed Japanese plane to prevent the United Nations from securing construction details. One Australian pilot reported seeing one fallen Japanese plane blasted thoroughly with incendiary bombs.

3. Fifth Column Activities

a. Burma.—Certain elements of the civilian population in Burma and even soldiers in the Burmese Division of the British Army have turned out to be Fifth Columnists or traitors. A "Free Burmese Army" has been organized with the aid of the Japanese and plans are being made to establish a "Free Burmese Government."

(1) "*Free Burmese Army.*"—The Army is organized in small groups, as a rule, and confines its efforts to guerrilla warfare. It is armed with old model Japanese rifles and light machine guns and is led by Japanese—occasionally by officers and noncommissioned officers of Thailand. The Army also has been strengthened with some soldiers who have deserted from the British Burmese Division. The

Army already has done considerable sabotaging, ambushing, and looting. Its flag consists of yellow, green, and red horizontal stripes with a peacock in the center.

(2) *Burmese Buddhist Priests*.—As was the case during the Malayan campaign, Burmese Buddhist priests in many instances have acted as Fifth Columnists in Burma. Also, many natives have cloaked themselves as priests or monks for the specific purpose of doing Fifth Column work. To do this they joined the priesthood order of poongees,* composed of monks and priests. Unlike most other priesthoods, the poongees require no special training or lifelong vows. So anyone—religious or otherwise—may become a poongee for any period desired by simply shaving his head, putting on a saffron robe, formally renouncing all things wordly before a temple, and thereafter living solely by begging. Publicly, the poongees are regarded as holy men who can do no wrong and police generally do not molest them. Under these conditions the British find it very difficult to track down Fifth Columnists or prevent their activities.

(3) *Thakins Party*.—The Japanese also have been supported by several thousand armed and organized Thakins, a native Burmese antiforeign political organization. One Thakin who fled Rangoon while it was still under British control has been taken to Tokyo, where nearly every night he appeals by radio to the Burmese for aid to the Japanese.

b. *New Guinea*.—German missionaries in New Guinea turned out to be Fifth Columnists. They helped the Japanese through the jungles to contact defending Australian forces. Also, some of the natives were believed to have cooperated with the invaders.

4. Countering Japanese Night Operations

The Japanese have shown themselves to be exceedingly well trained in night operations. British commanders have been instructed to develop original methods to combat enemy action at night. The following countermeasures have been adopted for their general guidance:

a. Changing dispositions after dark to include the use of false fronts to deceive enemy day reconnaissance, and the pushing forward of false flanks at night or establishing these false flanks in echelon behind the flanks held by day.

b. Establishment at dusk of standing patrols close to the enemy flanks or routes which he may use for outflanking movements by night.

c. Watching all routes well beyond the British flank, and using trip wires and other alarm signals.

d. Pushing out offensive detachments well beyond the British flanks to strike enemy flanking forces in the rear.

e. Bold offensive action against the enemy's flank and rear at all times.

f. Showing the enemy that he cannot expect to make definite plans for attack against a fixed and well reconnoitered position, but must himself be constantly on the lookout against surprise and attack. Experience has shown that the Japanese are peculiarly helpless against unforeseen action by an enemy force.

* Spelled also "poonghees" or "poonghies."

5. Effect of Concentrated Fire on the Japanese

The reaction of Japanese soldiers when massed and well-directed fire is placed upon them is illustrated by the following report from the Philippines:

"Our forces north of Davao in Mindanao recently staged a coordinated and successful attack on the Japanese. The attack was preceded by intensive reconnaissance of the Japanese rear and flanks. Hand grenades and automatic fire from rifles caused the enemy troops to break formation, throw their rifles aside, and flee. In the confusion, the Japanese fired mortars at their own troops. No artillery or aircraft supported the attack."

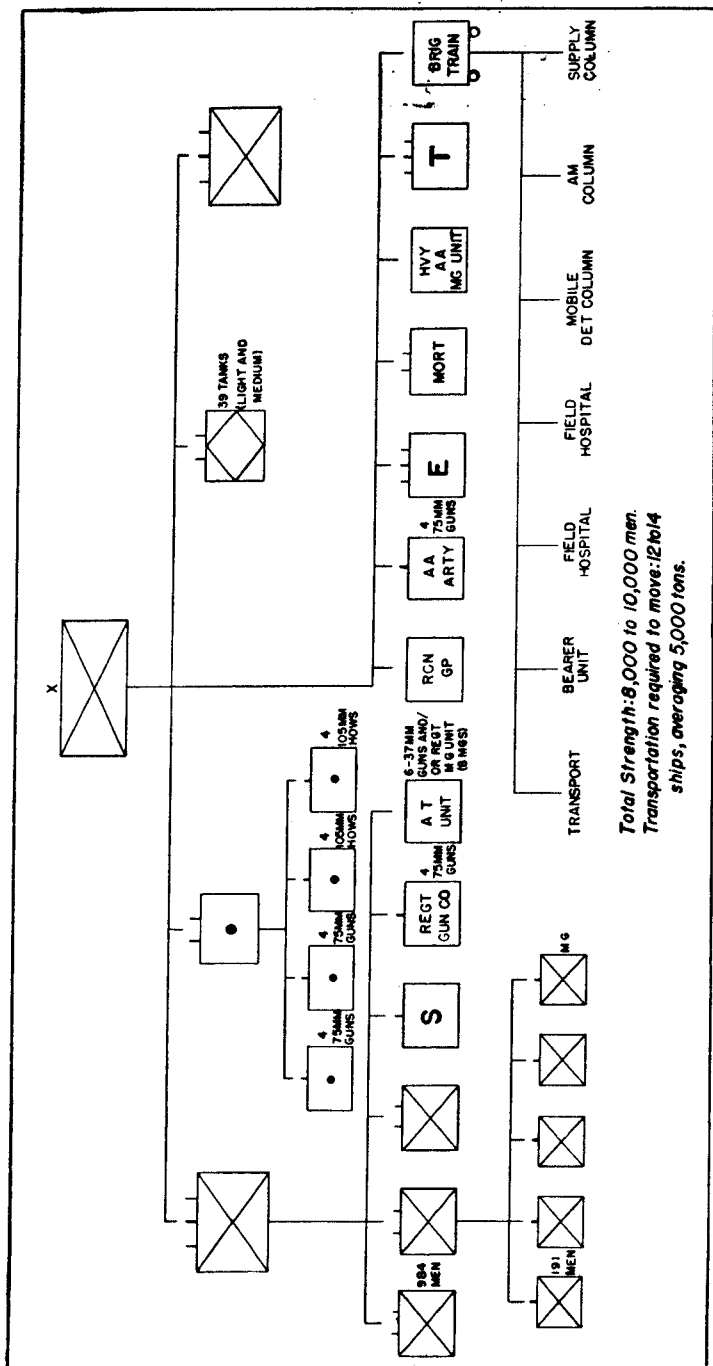


FIGURE 3.—Probable composition of a Japanese mobile mixed brigade.